

WHAT IS CLAIMED IS:

1. A method for compressing a Global Positioning System (GPS) signal, comprising:
removing a carrier component of the GPS signal;
5 matching a comb filter to the GPS signal to obtain a first output comprising filter
lines; and

frequency shifting the filter lines in the first output to produce a compressed GPS
signal.

10 2. The method of claim 1, further comprising frequency shifting the compressed GPS
signal to produce a second compressed GPS signal.

15 3. The method of claim 2, wherein the matching of the comb filter comprises:
sending a signal from a remote location to the GPS receiver via a wireless
communications link;

4. The method of claim 3, wherein the frequency shifting of the filter lines comprises
20 mixing the filter lines with at least one output of a frequency generator.